TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING VOLUME VIII - ENVIRONMENTAL HEALTH SERVICE

PART 111 - ENVIRONMENTAL MANAGEMENT

APPENDIX D - PROTECT YOUR FAMILY FROM LEAD IN YOUR HOME AN EPA PUBLICATION

- A. PROTECT YOUR FAMILY FROM LEAD IN YOUR HOME Simple Steps To Protect Your Family From Lead Hazards, if you think your home has high levels of lead:
 - * Get your young children tested for lead, even if they seem healthy.
 - * Wash children's hands, bottles, pacifiers, and toys often.
 - * Make sure children eat healthy, low-fat foods.
 - * Get your home checked for lead hazards.
 - * Regularly clean floors, window sills, and other surfaces.
 - * Wipe soil off shoes before entering house.
 - * Talk to your landlord about fixing surfaces with peeling or chipping paint.
 - * Take precautions to avoid exposure to lead dust when remodeling or renovating (call 1-800-424-LEAD for guidelines).
 - * Don't use a belt-sander, propane torch, dry scraper, or dry sandpaper on painted surfaces that may contain lead.
 - * Don't try to remove lead-based paint yourself.
- B. ARE YOU PLANNING TO BUY, RENT, OR RENOVATE A HOME BUILT BEFORE 1978? Many houses and apartments built before 1978 have paint that contains lead (called lead-based paint). Lead from paint, chips, and dust can pose serious health hazards if not taken care of properly. By 1996, federal law will require that individuals receive certain information before renting, buying, or renovating pre-1978 housing:
 - (1) LANDLORDS will have to disclose known information on lead-based paint hazards before leases take effect. Leases will include a federal form about lead-based paint.
 - (2) SELLERS will have to disclose known information on lead-based paint hazards before selling a house. Sales contracts will include a federal form about lead-based paint in the building. Buyers will have up to 10 days to check for lead hazards.
 - (3) RENOVATORS will have to give you this pamphlet before starting work
 - (4) If you want more information on these requirements, call the National Lead Information Clearinghouse at 1-800-424-LEAD.
- C. This document is in the public domain. It may be reproduced by an individual or organization without permission. Information provided in this booklet is based upon current scientific and technical understanding of the issues presented and is reflective of the jurisdictional boundaries established by the statutes governing the coauthoring agencies. Following the advice given will not necessarily provide complete protection in all situations or against all health hazards that can be caused by lead exposure.
 - (1) IMPORTANT Lead From Paint, Dust, and Soil Can Be Dangerous If Not Managed properly.

ENVIRONMENTAL HEALTH AND ENGINEERING

VOLUME VIII - ENVIRONMENTAL HEALTH SERVICE

PART 111 - ENVIRONMENTAL MANAGEMENT

FACT: Lead exposure can harm young children and babies even before they are born.

FACT: Even children that seem healthy can have high levels of lead in their bodies.

FACT: People can get lead in their bodies by breathing or swallowing lead dust, or by eating soil or paint chips with lead in them.

FACT: People have many options for reducing lead hazards. In most cases, lead-based paint that is in good condition is not a hazard. FACT: Removing lead-based paint improperly can increase the danger to your family.

- (2) If you think your home might have lead hazards, read this pamphlet to learn some simple steps to protect your family.
- (3) LEAD GETS IN THE BODY IN MANY WAYS
 - * 1 out of every 11 children in the United States has dangerous levels of lead in the bloodstream.
 - * Even children who appear healthy can have dangerous levels of lead.
 - * People can get lead in their body if they:
 - * Put their hands or other objects covered with lead dust in their mouths.
 - * Eat paint chips or soil that contain lead.
 - * Breathe in lead dust (especially during renovations that disturb painted surfaces).
 - * Lead is even more dangerous to children than adults because:
 - * Babies and young children often put their hands and other objects in their mouths. These objects can have lead dust on them.
 - * Children's growing bodies absorb more lead.
 - * Children's brains and nervous systems are more sensitive to the damaging effects of lead.
- (4) Lead's Effects
 - * If not detected early, children with high levels of lead in their bodies can suffer from:
 - * Damage to the brain and nervous system
 - * Behavior and learning problems (such as hyperactivity)
 - * Slowed growth
 - * Hearing problems
 - * Headaches
 - * Lead is also harmful to adults. Adults can suffer from:
 - * Difficulties during pregnancy
 - * Other reproductive problems (in both men and women)
 - * High blood pressure
 - * Digestive problems
 - * Nerve disorders
 - * Memory and concentration problems
 - * Muscle and joint pain

ENVIRONMENTAL HEALTH AND ENGINEERING

VOLUME VIII - ENVIRONMENTAL HEALTH SERVICE PART 111 - ENVIRONMENTAL MANAGEMENT

* Lead affects the body in many ways.

(5) CHECKING YOUR FAMILY FOR LEAD

- * Get your children tested if you think your home has high levels of lead. A simple blood test can detect high levels of lead. Blood tests are important for:
 - * Children who are 6 months to 1 year old (6 months if you live in an older home that might have lead in the paint).
 - * Family members that you think might have high levels of lead.
 - * If your child is older than 1 year, talk to your doctor about whether your child needs testing.
- * Your doctor or health center can do blood tests. They are inexpensive and sometimes free. Your doctor will explain what the test results mean. Treatment can range from changes in your diet to medication or a hospital stay.

(6) WHERE LEAD-BASED PAINT IS FOUND

- * In general, the older your home, the more likely it has lead-based paint.
- * Many homes built before 1978 have lead-based paint. In 1978, the federal government banned lead-based paint from housing. Lead can be found:
 - * In homes in the city, country, or suburbs.
 - * In apartments, single-family homes, and both private and public housing.
 - * Inside and outside of the house.
 - * In soil around a home. (Soil can pick up lead from exterior paint, or other sources such as past use of leaded gas in cars.)

(7) WHERE LEAD IS LIKELY TO BE A HAZARD

- * Lead from paint chips, which you can see, and lead dust, which you can't always see, can both be serious hazards.
- * Lead-based paint that is in good condition is usually not a
- * Peeling, chipping, chalking, or cracking lead-based paint is a hazard and needs immediate attention.
- * Lead-based paint may also be a hazard when found on surfaces that children can chew or that get a lot of wear-and-tear. These areas include:
 - * Windows and window sills.
 - * Doors and door frames.
 - * Stairs, railings, and banisters.
 - * Porches and fences.
- * Lead dust can form when lead-based paint is dry scraped, dry sanded, or heated. Dust also forms when painted surfaces bump or rub together. Lead chips and dust can get on surfaces and objects

ENVIRONMENTAL HEALTH AND ENGINEERING

VOLUME VIII - ENVIRONMENTAL HEALTH SERVICE

PART 111 - ENVIRONMENTAL MANAGEMENT

that people touch. Settled lead dust can reenter the air when people vacuum, sweep, or walk through it.

- * Lead in soil can be a hazard when children play in bare soil or when people bring soil into the house on their shoes. Call your state agency (see below) to find out about soil testing for lead.
- (8) CHECKING YOUR HOME FOR LEAD HAZARDS
 - * Just knowing that a home has lead-based paint may not tell you if there is a hazard.
 - * You can get your home checked for lead hazards in one of two ways, or both:
 - * A paint inspection tells you the lead content of every painted surface in your home. It won't tell you whether the paint is a hazard or how you should deal with it.
 - * A risk assessment tells you if there are any sources of serious lead exposure (such as peeling paint and lead dust). It also tells you what actions to take to address these hazards.
 - * Have qualified professionals do the work. The federal government is writing standards for inspectors and risk assessors. Some states might already have standards in place. Call your state agency for help with locating qualified professionals in your area (see below). Trained professionals use a range of methods when checking your home, including:
 - * Visual inspection of paint condition and location.
 - * Lab tests of paint samples.
 - * Surface dust tests.
 - * A portable x-ray fluorescence machine.
 - * Home test kits for lead are available, but the federal government is still testing their reliability. These tests should not be the only method used before doing renovations or to assure safety.
- (9) WHAT YOU CAN DO NOW TO PROTECT YOUR FAMILY? If you suspect that your house has lead hazards, you can take some immediate steps to reduce your family's risk:
 - * If you rent, notify your landlord of peeling or chipping paint.
 - * Clean up paint chips immediately.
 - * Clean floors, window frames, window sills, and other surfaces weekly. Use a mop or sponge with warm water and a general all-purpose cleaner or a cleaner made specifically for lead. REMEMBER: NEVER MIX AMMONIA AND BLEACH PRODUCTS TOGETHER SINCE THEY CAN FORM A DANGEROUS GAS.
 - * Thoroughly rinse sponges and mop heads after cleaning dirty or dusty areas.
 - * Wash children's hands often, especially before they eat and before nap time and bed time.
 - * Keep play areas clean. Wash bottles, pacifiers, toys, and stuffed animals regularly.
 - * Keep children from chewing window sills or other painted

ENVIRONMENTAL HEALTH AND ENGINEERING VOLUME VIII - ENVIRONMENTAL HEALTH SERVICE

PART 111 - ENVIRONMENTAL MANAGEMENT

surfaces.

- * Clean or remove shoes before entering your home to avoid tracking in lead from soil.
- * Make sure children eat nutritious, low-fat meals high in iron and calcium, such as spinach and low-fat dairy products. Children with good diets absorb less lead.

(10) HOW TO SIGNIFICANTLY REDUCE LEAD HAZARDS

- * Removing lead improperly can increase the hazard to your family by spreading even more lead dust around the house.
- * Always use a professional who is trained to remove lead hazards safely.
- * In addition to day-to-day cleaning and good nutrition:
 - * You can temporarily reduce lead hazards by taking actions like repairing damaged painted surfaces and planting grass to cover soil with high lead levels. These actions (called "interim controls") are not permanent solutions and will not eliminate all risks of exposure.
 - * To permanently remove lead hazards, you must hire a lead "abatement" contractor. Abatement (or permanent hazard elimination) methods include removing, sealing, or enclosing lead-based paint with special materials. Just painting over the hazard with regular paint is not enough.
 - * Always hire a person with special training for correcting lead problems—someone who knows how to do this work safely and has the proper equipment to clean up thoroughly. If possible, hire a certified lead abatement contractor. Certified contractors will employ qualified workers and follow strict safety rules as set by their state or by the federal government.
 - * Call your state agency (see below) for help with locating qualified contractors in your area and to see if financial assistance is available.

(11) REMODELING OR RENOVATING A HOME WITH LEAD-BASED PAINT

- * If not conducted properly, certain types of renovations can release lead from paint and dust into the air.
- * Take precautions before you begin remodeling or renovations that disturb painted surfaces (such as scraping off paint or tearing out walls):
 - * Have the area tested for lead-based paint.
 - * Do not use a dry scraper, belt-sander, propane torch, or heat gun to remove lead-based paint. These actions create large amounts of lead dust and fumes. Lead dust can remain in your home long after the work is done.
 - * Temporarily move your family (especially children and pregnant women) out of the apartment or house until the work is done and the area is properly cleaned. If you can't move your family, at least completely seal off the work area.
 - * Follow other safety measures to reduce lead hazards. You

ENVIRONMENTAL HEALTH AND ENGINEERING

VOLUME VIII - ENVIRONMENTAL HEALTH SERVICE

PART 111 - ENVIRONMENTAL MANAGEMENT

can find out about other safety measures by calling 1(800)424-LEAD. Ask for the brochure "Reducing Lead Hazards When Remodeling Your Home." This brochure explains what to do before, during, and after renovations.

* If you have already completed renovations or remodeling that could have released lead-based paint or dust, get your young children tested and follow the steps outlined above in this brochure.

(12) OTHER SOURCES OF LEAD

- * While paint, dust, and soil are the most common lead hazards, other lead sources also exist.
- * Drinking water. Your home might have plumbing with lead or lead solder. Call your local health department or water supplier to find out about testing your water. You cannot see, smell, or taste lead, and boiling your water will not get rid of lead. If you think your plumbing might have lead in it:
 - * Use only cold water for drinking and cooking.
 - * Run water for 15 to 30 seconds before drinking it, especially if you have not used your water for a few hours.
- * The job. If you work with lead, you could bring it home on your hands or clothes. Shower and change clothes before coming home. Launder your clothes separately from the rest of your family's.
- * Old painted toys and furniture.
- * Food and liquids stored in lead crystal or lead-glazed pottery or porcelain.
- * Lead smelters or other industries that release lead into the air.
- * Hobbies that use lead, such as making pottery or stained glass, or refinishing furniture.
- * Folk remedies that contain lead, such as "greta" and "azarcon" used to treat an upset stomach.

(13) FOR MORE INFORMATION

- * The National Lead Information Center, Call 1(800) LEAD-FYI to learn how to protect children from lead poisoning.
- * For other information on lead hazards, call the center's clearinghouse at 1(800)424-LEAD. For the hearing impaired, call TDD 1(800)526-5456 (FAX: 202-659-1192, Internet: EHC@CAIS.COM).
- * EPA's Safe Drinking Water Hotline, Call 1(800)426-4791 for information about lead in drinking water.
- * Consumer Product Safety Commission Hotline
- * To request information on lead in consumer products, or to report an unsafe consumer product or a product-related injury call 1(800)638-2772. (Internet: info@cpsc.gov). For the hearing impaired, call TDD 1(800)638-8270.

(14) STATE HEALTH AND ENVIRONMENTAL AGENCIES

ENVIRONMENTAL HEALTH AND ENGINEERING

VOLUME VIII - ENVIRONMENTAL HEALTH SERVICE

PART 111 - ENVIRONMENTAL MANAGEMENT

* Some cities and states have their own rules for lead-based paint activities. Check with your state agency (listed below) to see if state or local laws apply to you. Most state agencies can also provide information on finding a lead abatement firm in your area, and on possible sources of financial aid for reducing lead hazards.

Chaha /Danian	Db	Manuelo
State/Region	Phone	Number
Alabama	(205)	242-5661
Alaska	(907)	465-5152
Arkansas	(501)	661-2534
Arizona	(602)	542-7307
California	(510)	450-2424
Colorado	(303)	692-3012
Connecticut	(203)	566-5808
Washington, DC	(202)	727-9850
Delaware	(302)	739-4735
Florida	(904)	488-3385
Georgia	(404)	657-6514
Hawaii	(808)	832-5860
Idaho	(208)	332-5544
Illinois	(800)	545-2200
Indiana	(317)	382-6662
Iowa	(800)	972-2026
Kansas	(913)	296-0189
Kentucky	(502)	564-2154
Louisiana	(504)	765-0219
		532-9571
Massachusetts	(800)	
Maryland	(410)	631-3859
Maine	(207)	287-4311
Michigan	(517)	335-8885
Minnesota	(612)	627-5498
Mississippi	(601)	960-7463
Missouri	(314)	526-4911
Montana	(406)	444-3671
Nebraska	(402)	471-2451
Nevada	(702)	687-6615
New Hampshire	(603)	271-4507
New Jersey	(609)	633-2043
New Mexico	(505)	841-8024
New York	(800)	458-1158
North Carolina	(919)	715-3293
North Dakota	(701)	328-5188
Ohio	(614)	466-1450
Oklahoma	(405)	271-5220
Oregon	(503)	248-5240
Pennsylvania	(717)	782-2884
Rhode Island	(401)	277-3424
South Carolina	(803)	935-7945
South Dakota	(605)	773-3153
Tennessee	(615)	741-5683
Texas	(512)	834-6600
	/	

ENVIRONMENTAL HEALTH AND ENGINEERING

VOLUME VIII - ENVIRONMENTAL HEALTH SERVICE

PART 111 - ENVIRONMENTAL MANAGEMENT

Utah	(801)	536-4000
Vermont	(802)	863-7231
Virginia	(800)	523-4019
Washington	(206)	753-2556
West Virginia	(304)	558-2981
Wisconsin	(608)	266-5885
Wyoming	(307)	777-7391

(15) EPA REGIONAL OFFICES

- * Your Regional EPA Office can provide further information regarding regulations and lead protection programs.
- * EPA Regional Offices

```
Region 1 (Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, Vermont)
```

John F. Kennedy Federal Building

One Congress Street

Boston, MA 02203 Tel. No. (617) 565-3420

Region 2 (New Jersey, New York, Puerto Rico, Virgin Islands) Building 5

2890 Woodbridge Avenue

Edison, NJ 08837-3679 Tel. No. (908) 321-6671

Region 3 (Delaware, Washington DC, Maryland, Pennsylvania, Virginia, West Virginia)

841 Chestnut Building

Philadelphia, PA 19107 Tel. No. (215) 597-9800

Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee)

345 Courtland Street, NE

Atlanta, GA 30365 Tel. No. (404) 347-4727

Region 5 (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin)

77 West Jackson Boulevard

Chicago, IL 60604-3590 Tel. No. (312) 886-6003

Region 6 (Arkansas, Louisiana, New Mexico, Oklahoma, Texas) First Interstate Bank Tower

1445 Ross Avenue, 12th Floor, Suite 1200

Dallas, TX 75202-2733 Tel. No. (214) 665-7244

Region 7 (Iowa, Kansas, Missouri, Nebraska)

726 Minnesota Avenue

Kansas City, KS 66101 Tel. No. (913) 551-7020

Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming)

999 18th Street, Suite 500

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING

VOLUME VIII - ENVIRONMENTAL HEALTH SERVICE

PART 111 - ENVIRONMENTAL MANAGEMENT

Denver, CO 80202-2405

Tel. No. (303) 293-1603

Region 9 (Arizona, California, Hawaii, Nevada)

75 Hawthorne Street

San Francisco, CA 94105 Tel. No. (415) 744-1124

Region 10 (Idaho, Oregon, Washington, Alaska)

1200 Sixth Avenue

Seattle, WA 98101 Tel. No. (206) 553-1200

(16) CPSC REGIONAL OFFICES

Eastern Regional Center 6 World Trade Center Vesey Street, Room 350

New York, NY 10048

Tel. No. (212) 466-1612

Central Regional Center

230 South Dearborn Street, Room 2944

Chicago, IL 60604-1601 Tel. No. (312) 353-8260

Western Regional Center

600 Harrison Street, Room 245

San Francisco, CA 94107 Tel. No. (415) 744-2966